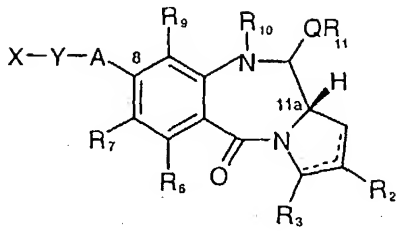
CLAIMS

1. A compound of formula (I):



(I)

wherein:

X is selected from COOH, NHZ, SH, or OH, where Z is either H or an amine protecting group;

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

R_{11} is either H or R;

Q is S, O or NH;

R_{10} is a nitrogen protecting group;

where R is a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms, which may form part of, or be, a functional group; and

Y is a divalent group such that HY = R.

2. A compound according to claim 1, wherein R and HY are independently selected from lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, or an aryl group, of up to 12 carbon atoms, optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

3. A compound according to claim 2, wherein R and HY are independently selected from lower alkyl groups having 1 to 10 carbon atoms optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

4. A compound according to claim 3, wherein R or HY are independently selected from unsubstituted straight or branched chain alkyl groups, having 1 to 10 carbon atoms.

5. A compound according to any one of the preceding claims, wherein R_{10} has a carbamate functionality where it binds to the nitrogen atom at the 10 position of the PBD ring structure.

6. A compound according to any one of the preceding claims, wherein R_7 is an electron donating group.

7. A compound according to any one of the preceding claims, wherein Q is O, and/or R_{11} is H.

8. A compound according to any one of the preceding claims,

wherein R_6 and R_9 are H.

9. A compound according to claim 8, wherein R_7 is an alkoxy group.

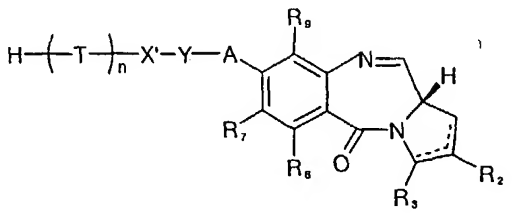
10. A compound according to any one of the preceding claims, wherein R_2 and R_3 are H.

11. A compound according to any one of the preceding claims, wherein there is no double bond between C2 and C3.

12. A compound according to any one of the preceding claims, wherein

-Y-A- is an alkoxy chain.

13. A compound of formula **II** :



(II)

wherein Y, A, R_7, R_2, R_3, R_6, and R_9 are as defined in any one of claims 1 to 12;

X' is CO, NH, S or O;

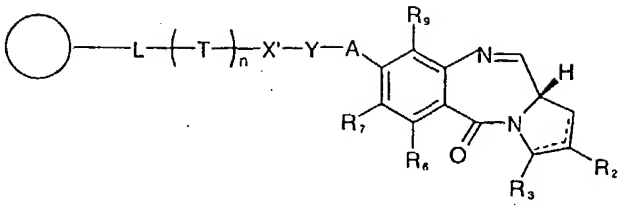
T is a combinatorial unit;

and n is a positive integer.

14. A compound according to claim 13, wherein X' is either CO or NH.

15. A compound according to any one of claims 13 to 15, wherein n is from 1 to 16.

16. A compound of formula **III**:



(III)

wherein X', Y, A, R_7, R_2, R_3, R_6, R_9, and T are as defined in any one of claims 13 to 15;

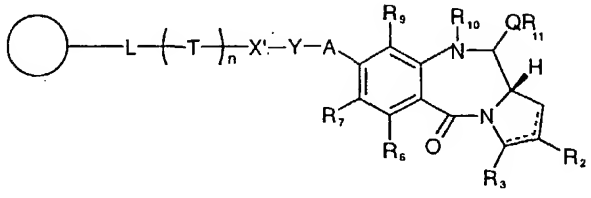
n is zero or a positive integer;

L is a linking group, or a single bond;

and O is a solid support.

17. A compound according to claim 18, wherein L is a linking group.

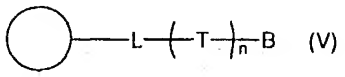
18. A compound of the formula **IV**:



(IV)

wherein X', Y, A, R_7, R_2, R_3, R_6, R_9, T, n, L and O are as defined in either claim 16 or claim 17, and R_{10}, R_{11}, and Q are as defined in any one of claims 1 to 12.

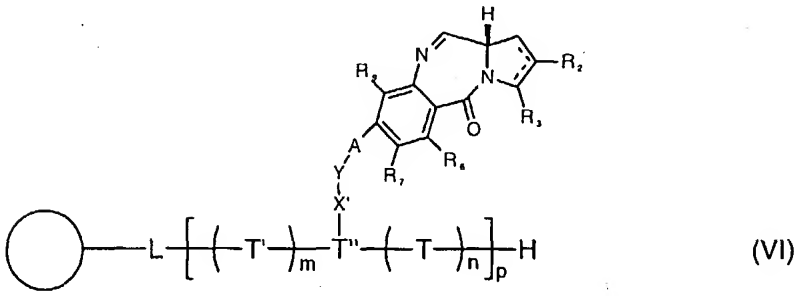
19. A method of making a compound according to claim 18, by reacting a compound of formula I as defined in any of claims 1 to 12 with a compound of formula V:



(V)

wherein O, L, T and n are as defined in claim 19, and B is H or an atom or group for providing a functional group capable of reaction with X.

20. A compound of the formula VI:



(VI)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9 and T are as defined in either claim 16 or claim 17;

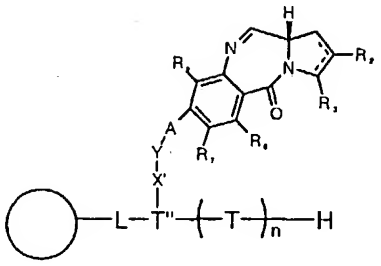
n and m are positive integers, or one of them may be zero;

T' is a combinatorial unit, where each T' may be different if m is greater than 1;

T" is a combinatorial unit which provides a site for the attachment of X'; and

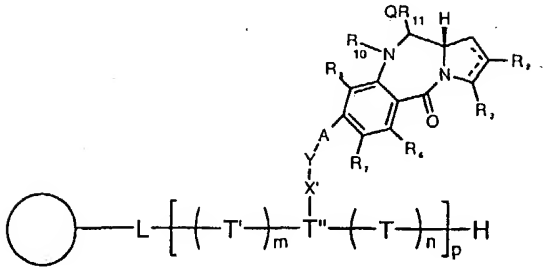
p is a positive integer, where if p is greater than 1, for each repeating unit, the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and the values of n and m are independently selected.

21. A compound according to claim 2 of the formula **VIa**:



(VIa)

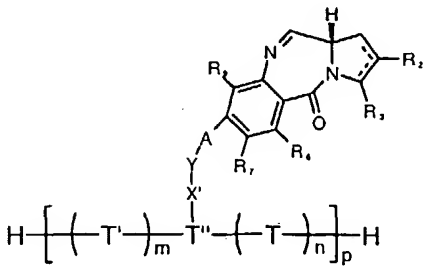
22. A compound of the formula **VII**:



(VII)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", n, m and p are as defined in claim 20 and Q, R_{10}, and R_{11}, are as defined in claim 18, where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T",Q, R_{10}, R_{11} and the values of n and m are independently selected.

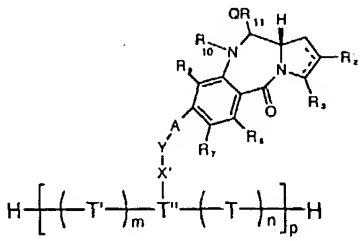
23. A compound of the formula **VIII**:



(VIII)

wherein X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", n, m and p are as defined in the claim 20, where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and values of n and m are independently selected.

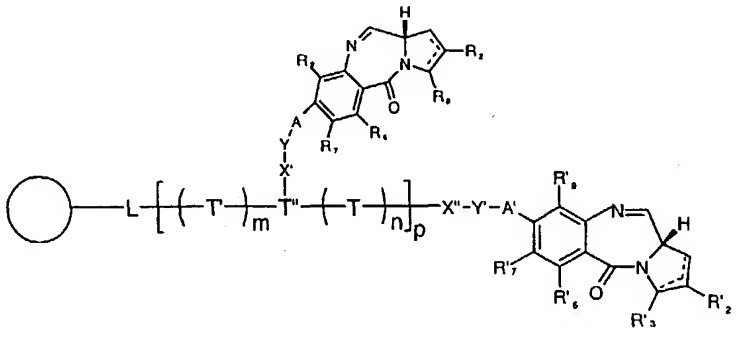
24. A compound of the formula **IX**:



(IX)

wherein X', Y, A, R_2, R_3, R_6, R_7, R_9, Q, R_{10}, R_{11}, T, T', T", n, m and p are as defined in claim 22, where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_7, R_2, R_3, R_6, R_9, T, T', T",Q, R_{10}, R_{11} and values of n and m are independently selected.

25. A compound of the formula **X**:

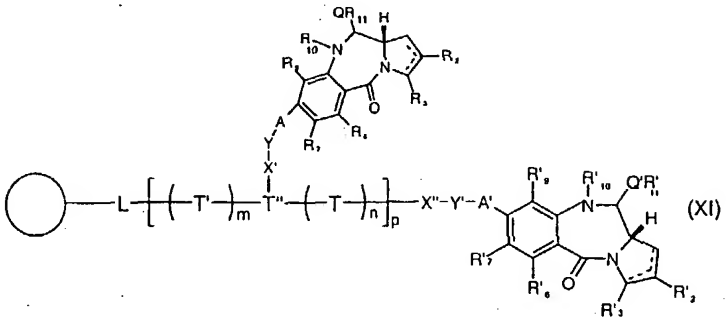


(X)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", n, m and p are as defined in claim 20, and X", Y', A', R'_2, R'_3, R'_6, R'_7 and R'_9 are selected from the same possibilities as X', Y, A,

R_2, R_3, R_6, R_7 and R_9 respectively, and where if p is greater than 1, for each repeating unit the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and the values of n and m may be independently selected.

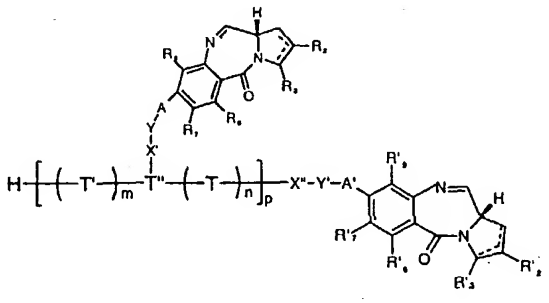
26. A compound of the formula **XI**:



(XI)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9, X", Y', A', R'_2, R'_3, R'_6, R'_7, R'_9, T, T', T", n, m and p are as defined in claim 25, Q, R_{10}, and R_{11}, are as defined in claim 18, and Q', R'_{10}, R'_{11}, have the same definitions as Q, R_{10}, R_{11}, respectively, and where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T",Q, R_{10}, R_{11} and the values of n and m are independently selected.

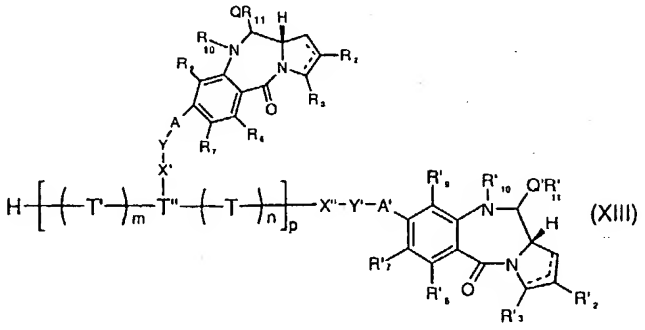
27. A compound of the formula **XII**:



(XII)

wherein X', Y, A, R_7, R_2, R_3, R_6, R_9, X", Y', A', R'_7, R'_2, R'_3, R'_6, R'_9, T, T', T", n, m and p are as defined in claim 25, and where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', and T" and the values of n and m may be independently selected.

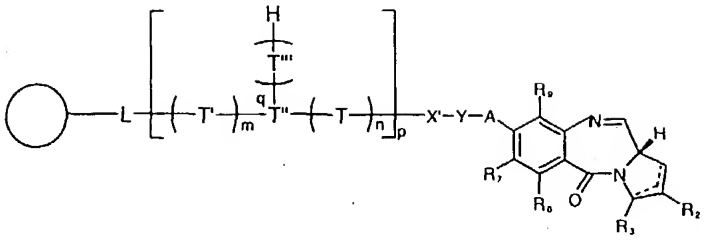
28. A compound of the formula **XIII**:



(XIII)

wherein X', Y, A, R_2, R_3, R_6, R_7, R_9, Q, R_{10}, R_{11}, X", Y', A', R'_2, R'_3, R'_6, R'_7, R'_9, Q', R'_{10}, R'_{11} T, T', T", n, m and p are as defined in claim 26, and where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", Q, R_{10}, R_{11} and the values of n and m may be independently selected.

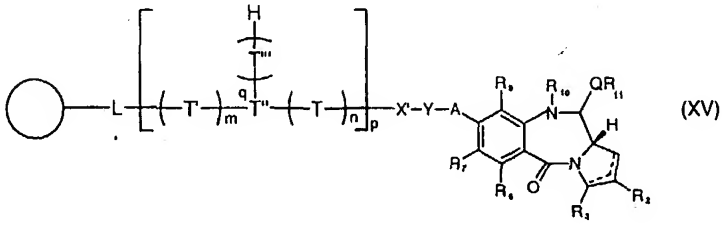
29. A compound of the formula **XIV**:



(XIV)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", n, m and p are as defined in claim 20, and T"' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, for each repeating unit the meaning of T, T', T", T"' and the values of n, m and q may be independently selected.

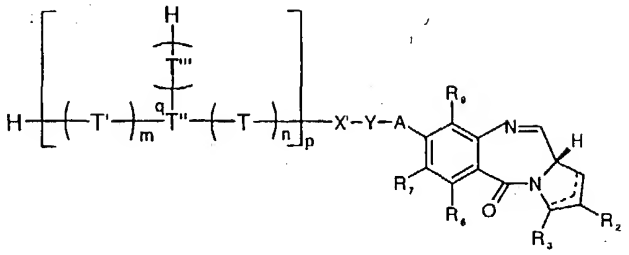
30. A compound of the formula **XV**:



(XV)

wherein O, L, X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T", T"', n, m, p and q are as defined in claim 29, Q, R_{10}, and R_{11} are as defined in claim 18, and where if p is greater than 1, for each repeating unit the meanings of T, T', T",T"' and the values of n, m and q may be independently selected.

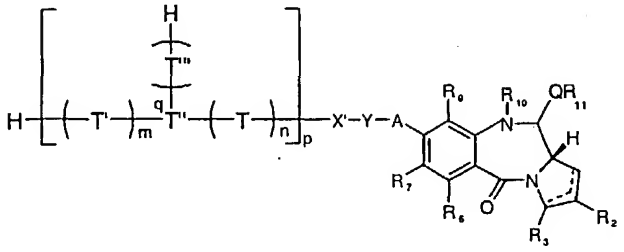
31. A compound of the formula **XVI**:



(XVI)

wherein X', Y, A, R_7, R_2, R_3, R_6, R_9, T, T', T", T"', n, m, p and q are as defined in claim 29, and where if p is greater than 1, the meanings of T, T', T", T"' and values of n, m and q may be independently selected.

32. A compound of the formula **XVII**:



(XVII)

wherein X', Y, A, R_2, R_3, R_6, R_7, R_9, Q, R_{10}, R_{11}, T, T', T", T"', n, m, p and q are as defined in claim 30, and where if p is greater than 1, for each repeating unit the meanings of T, T', T", T"' and the values of n, m and q may be independently selected.

33. A collection of compounds all of which are represented by either:

(i) formula **I** as defined in any one of claims 1 to 12;

(ii) formula **II** as defined in any one of claims 13 to 15;

(iii) formula **III** as defined in either claim 16 or 17;

(iv) formula **IV** as defined in claim 18;

(v) formula **VI** as defined in claim 20;

(vi) formula **VII** as defined in claim 22;

(vii) formula **VIII** as defined in claim 23;

(viii) formula **IX** as defined in claim 24;

(ix) formula **X** as defined in claim 25;

(x) formula **XI** as defined in claim 26;

(xi) formula **XII** as defined in claim 27;

(xii) formula **XIII** as defined in claim 28;

(xiii) formula **XIV** as defined in claim 29;

(xiv) formula **XV** as defined in claim 30;

(xv) formula **XVI** as defined in claim 31; or

(xvi) formula **XVII** as defined in claim 32.

34. A method of preparing a collection of compounds as defined in claim 33.

35. A method of screening compounds of:

(i) formula **II** as defined in any one of claims 13 to 15;

(ii) formula **III** as defined in either claim 16 or 17;

(iii) formula **IV** as defined in claim 18;

(iv) formula **VI** as defined in claim 20;

(v) formula **VIII** as defined in claim 23;

(vi) formula **X** as defined in claim 25;

(vii) formula **XII** as defined in claim 27;

(viii) formula **XIV** as defined in claim 29; or

(ix) formula **XVI** as defined in claim 31

to discover biologically active compounds.

36. The use of a compound of:

(i) formula **II** as defined in any one of claims 13 to 15;

(ii) formula **VIII** as defined in claim 23;

(iii) formula **XII** as defined in claim 27; or

(iv) formula **XVI** as defined in claim 31

in the manufacture of a cytotoxic, antibiotic, antiparasitic or antiviral therapeutic composition.

37. The use of a compound of:

(i) formula **II** as defined in any one of claims 13 to 15;

(ii) formula **VIII** as defined in claim 23;

(iii) formula **XII** as defined in claim 27; or

(iv) formula **XVI** as defined in claim 31

in a method of diagnosis.

38. The use of a compound of:

(i) formula **II** as defined in any one of claims 13 to 15;

(ii) formula **VIII** as defined in claim 23;

(iii) formula **XII** as defined in claim 27; or

(iv) formula **XVI** as defined in claim 31

in a method of target validation pr om functional genomics.